







SMART GRID COOP UTILITY SNAPSHOT 2011

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1 INTRODUCTION

While much of the media and analyst coverage concerning the build-out of the smart grid has focused on investor-owned utilities and municipal utilities, rural utilities do, in fact, represent more than 42 million people (and 17 million meters) across 47 different states in the U.S. Clearly, rural utilities represent a minority of the overall market, with approximately 10% of the overall kWh sales and 10% of the revenue, but they are a compelling subject of study in that they are not subject to the same regulations as the larger electric utilities, and as such can adopt new technologies faster, if they choose to.

FIGURE 1-1: ELECTRIC UTILITY COMPARISONS

Electric Utility Comparisons

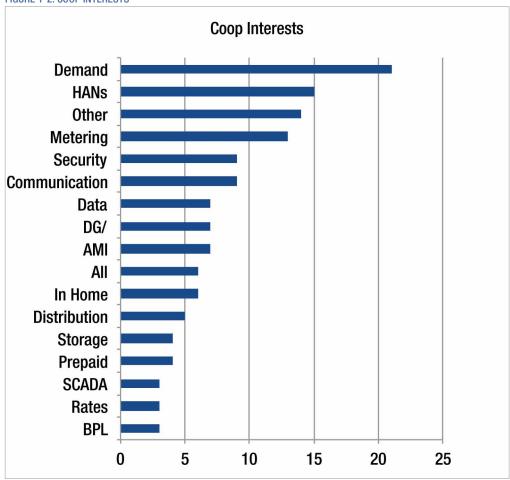
	Investor- Owned	Publicly Owned	Cooperatives	Total
Number of Organizations	220	2,000	930	3,150
Number of Total Customers	102 m	20 m	17 m	140 m
Size (median number of customers)	400,000	2,000	12,500	
Customers, % of total	73%	15%	12%	
Revenues, % of total	76%	14%	10%	
kWh sales, % of total	74%	16%	10%	

Source: National Rural Electric Cooperative Association

In this Smart Grid Coop Utility Snapshot, we present our readers with survey data from more than 70 different rural utilities. More than half of the individuals surveyed hold the title of President and/or CEO, and 92% of those surveyed claim to be decision makers. With 85% of those surveyed being exclusively distribution utilities, this is a fair representation of rural utilities in general, as they tend not to hold generation and transmission assets. To get a clearer sense of the size of these utilities, on average, each of the coops surveyed has approximately 20 substations and 25,000 meters.

In this survey, we ask rural utility executives about the extent to which they have deployed various smart grid technologies, including renewable energy and demand response. As one example, the following graph shows their interest in a wide range of smart grid solutions.

FIGURE 1-2: COOP INTERESTS



We hope that this snapshot is helpful in providing a basic sense of this market. In the near future, we intend to provide more comprehensive research concerning rural utilities and their implementation of smart grid technologies.

2 SURVEY DATA

FIGURE 2-1: ARE YOU A DECISION MAKER AT YOUR COOPERATIVE

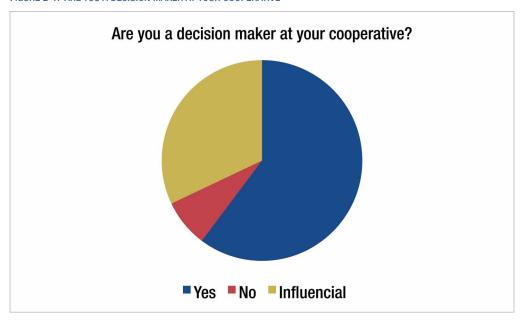


FIGURE 2-2: DOES YOUR COOP HAVE TRANSMISSION IMPLEMENTED

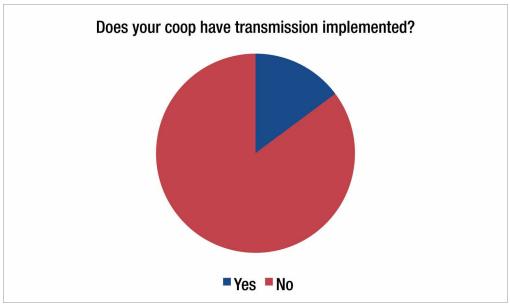


FIGURE 2-3: DOES YOUR COOP HAVE DG/RENEWABLES IN USE

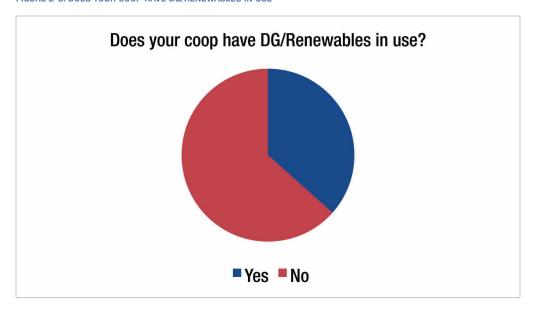


FIGURE 2-4: DOES YOUR COOP HAVE HANS IN USE

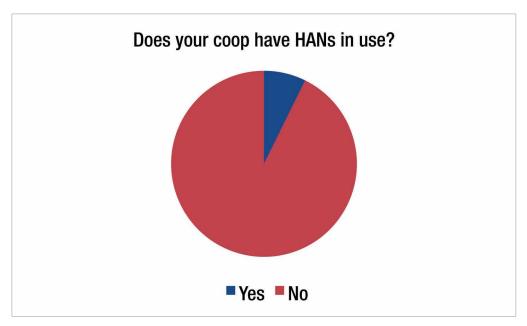


FIGURE 2-5: HAS YOUR COOP IMPLEMENTED SECURITY MEASURES

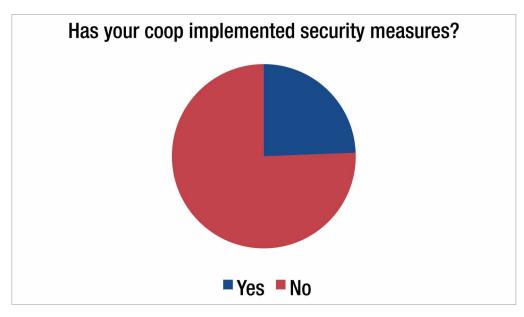


FIGURE 2-6: DOES YOUR COOP USE METERING

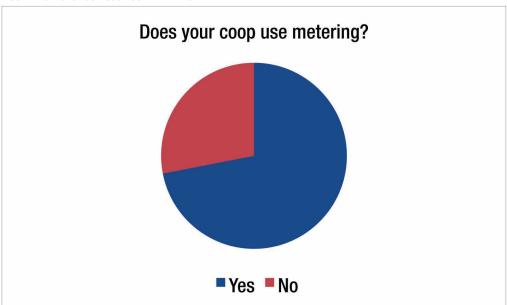


FIGURE 2-7: DOES YOUR COOP HAVE DEMAND RESPONSE IN USE

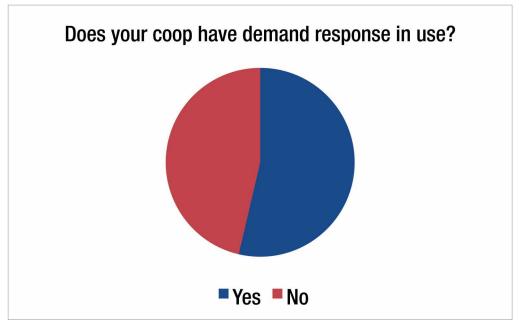


FIGURE 2-8: DOES YOUR COOP USE STORAGE

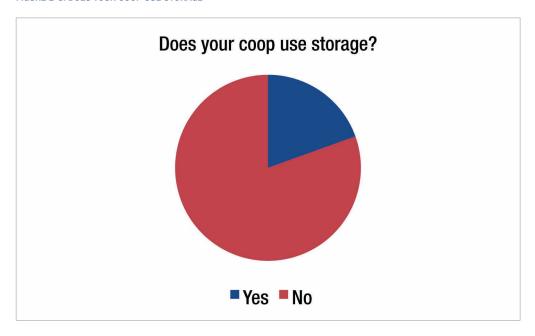


FIGURE 2-9: HAS YOUR COOP IMPLEMENTED AN IT & BACK OFFICE

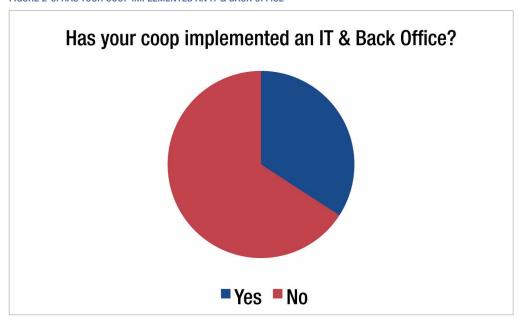


FIGURE 2-10: IT & BACK OFFICE EXAMPLES

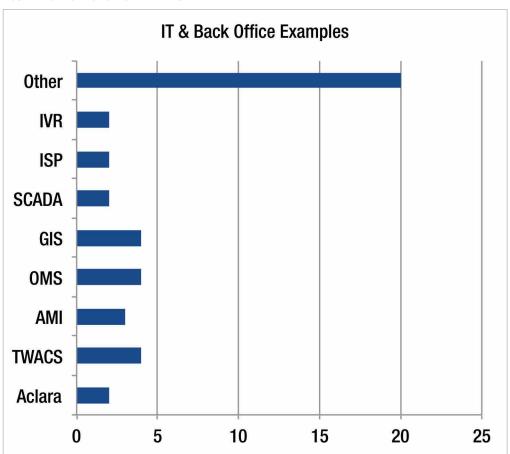


FIGURE 2-11: DOES YOUR COOP HAVE COMMUNICATION TECHNOLOGIES IN PLACE

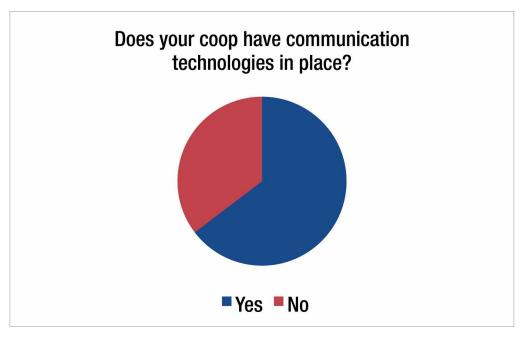


FIGURE 2-12: COMMUNICATION TYPES VS. COOPS WHERE IMPLEMENTED

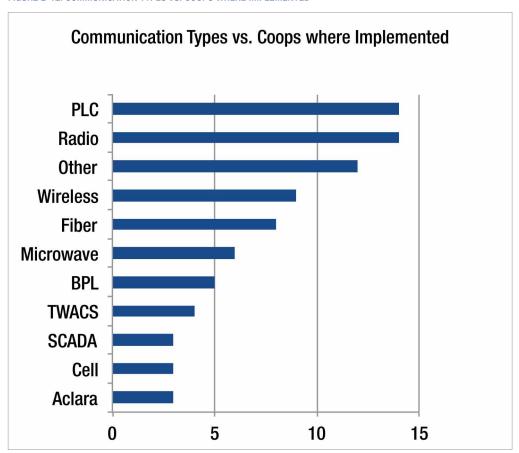


FIGURE 2-13: COOP INTERESTS

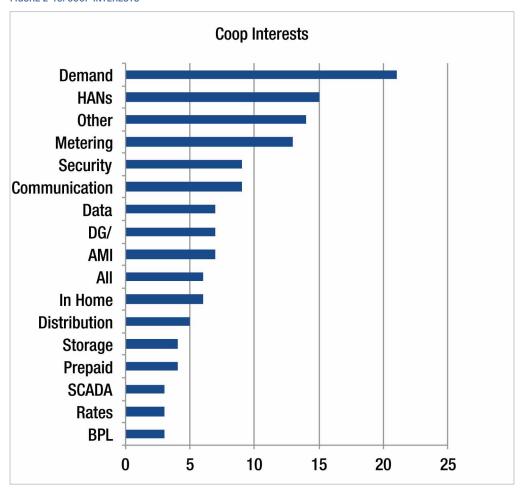


FIGURE 2-14: COMMERCIAL MEMBERS

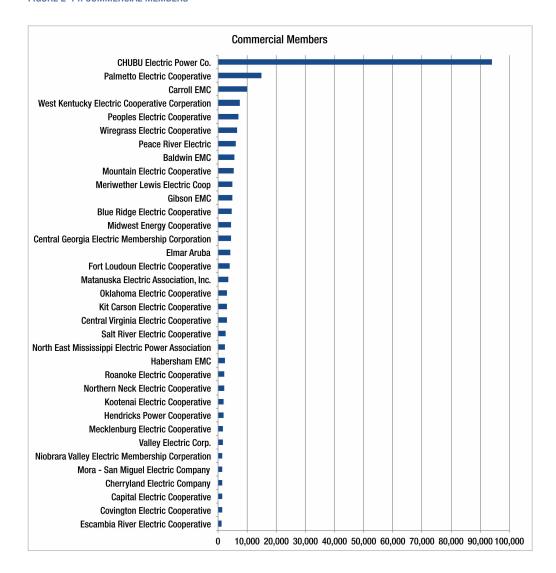


Figure 2-14 continued

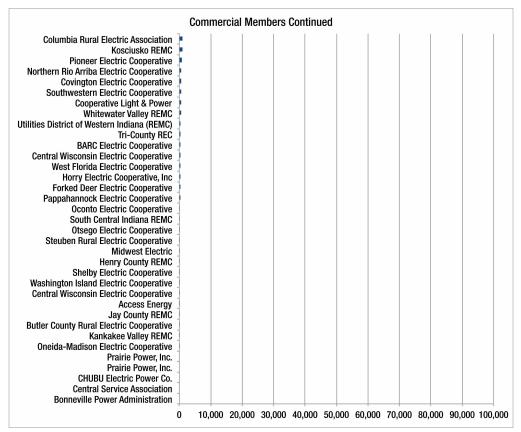


FIGURE 2-15: RESIDENTIAL MEMEBERS

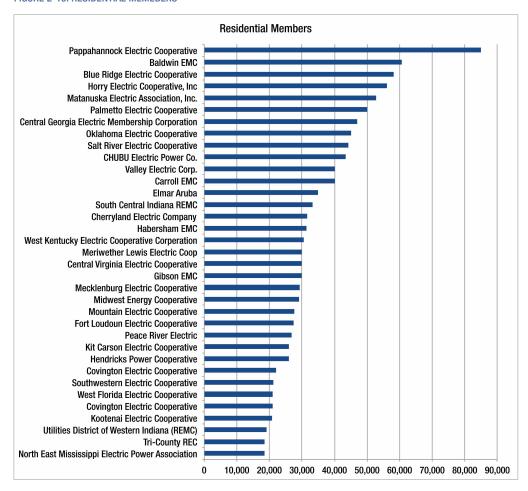


Figure 2-15 continued

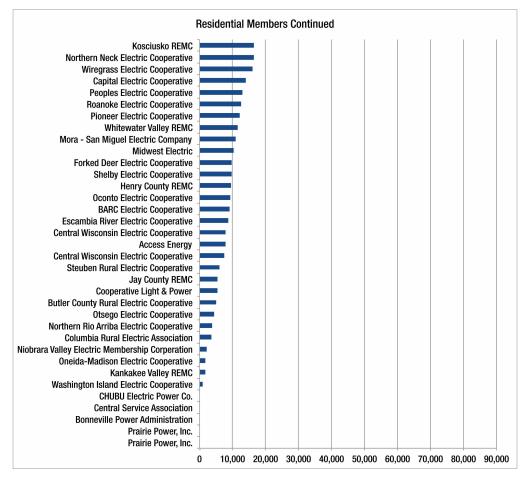


FIGURE 2-16: TOTAL MEMBERS

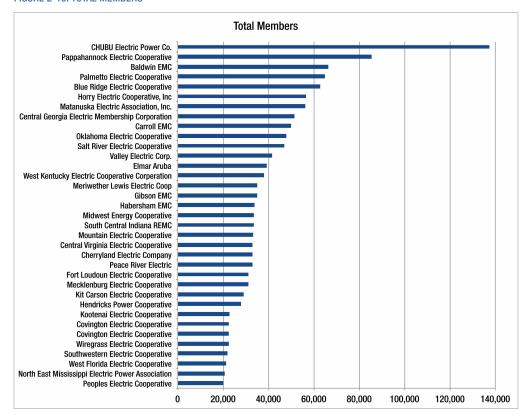


Figure 2-16 continued

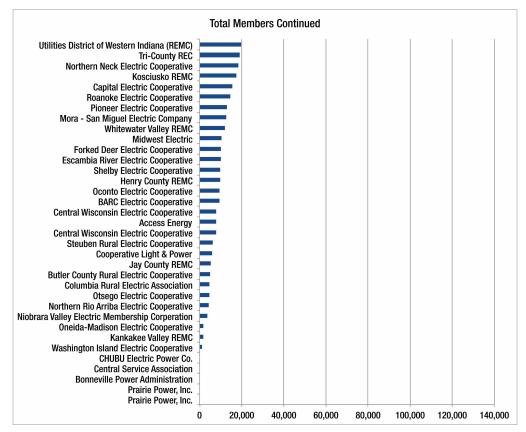


FIGURE 2-17: METERS

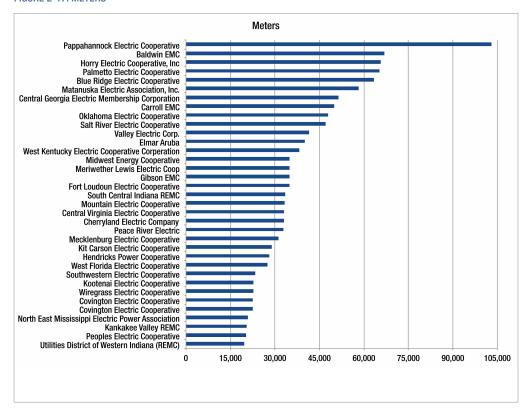


Figure 2-17 continued

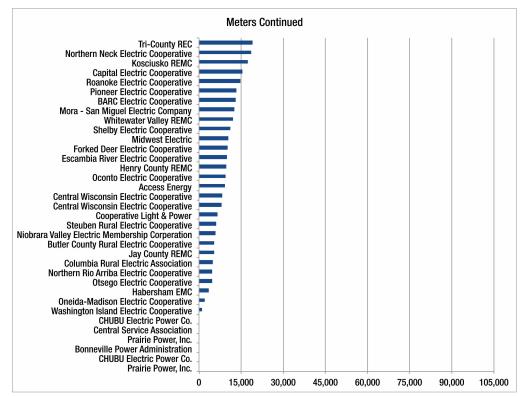


FIGURE 2-18: MEDIUM VOLTAGE LINE MILES

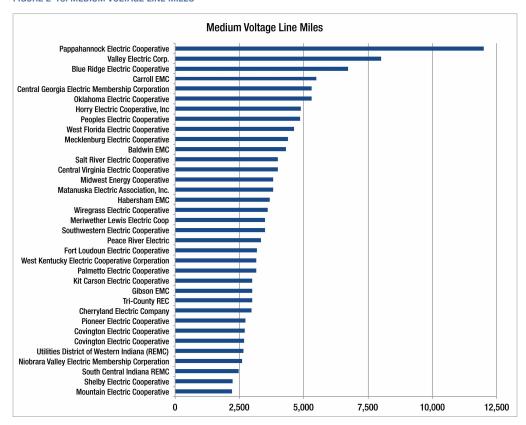


Figure 2-18 continued

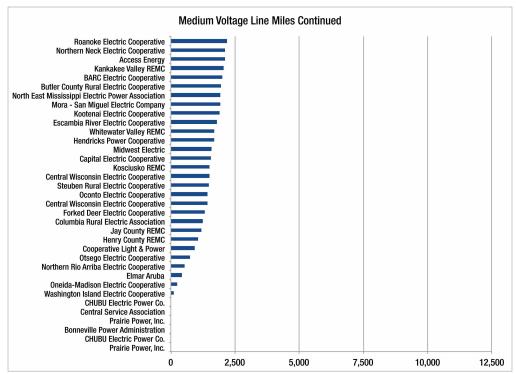


FIGURE 2-19: SUBSTATIONS

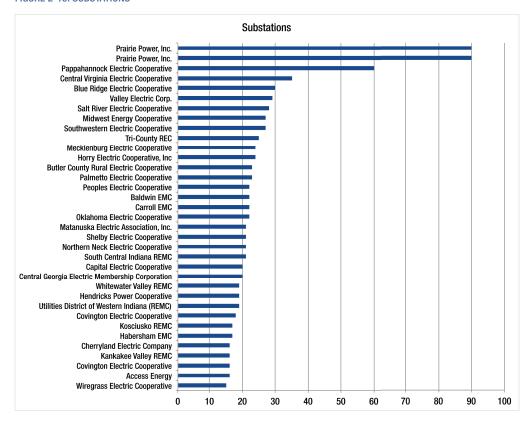
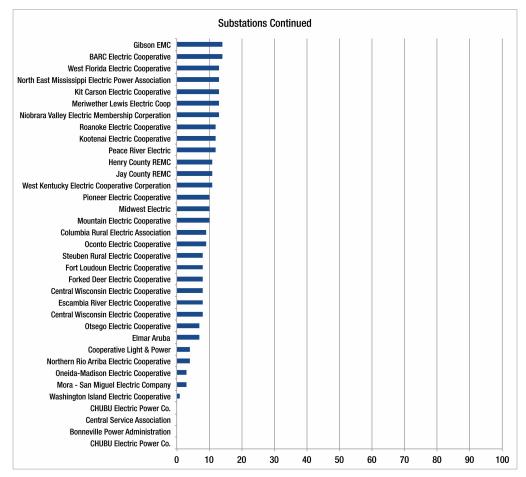


Figure 2-19 continued



3 COOP PROFILES

3.1 Access Energy Cooperative

1800 W Washington PO Box 440 Mount Pleasant, IA 52641 Bob Swindell, General Manager/CEO

Access Energy Cooperative, headquartered in Mount Pleasant, Iowa, provides electric service to more than 9000 homes, farms and businesses in southeastern Iowa. Access Energy Cooperative operates over 2200 miles of line and has annual sales of 220,000 megawatt-hours. The coop purchases wholesale power as a member of Northeast Missouri Power Cooperative and Associated Electric Cooperative.

3.2 Baldwin EMC

PO Box 220 Summerdale, AL 36580-0220 E. A. "Bucky" Jakins, Jr., CEO

Baldwin EMC is a member-owned cooperative supplying electric service to more than 66,000 customers in southwestern Alabama. Baldwin EMC's service territory is diverse, ranging from the resort communities on the Alabama Gulf Coast to the suburbs in the center of the service territory and the rural timberland and farmland in the northern region. Organized in 1937, Baldwin EMC is now the largest electric cooperative in the state of Alabama and employs nearly 200 area residents. Experienced leadership and sound business principles have made Baldwin EMC a strong, growing organization, well positioned to assist members in managing their energy needs.

3.3 BARC Electric Cooperative

84 High Street, PO Box 264 Millboro, VA 24460-0264 Bruce M. King, CEO/General Manager Michael J. Keyser, General Manager

BARC, a member-owned electric cooperative located in Millboro, Virginia, serves more than 12,500 consumers in Bath, Rockbridge, Alleghany, Highland and Augusta Counties. With over 1950 miles of line, BARC's service territory stretches from the Blue Ridge Parkway on the east to the West Virginia state line. BARC has partnered with IBEC to provide high-speed internet over the coop's power lines.

3.4 Blue Ridge Electric Cooperative, Inc.

PO Box 277
Pickens, SC 29671
C. Alan Blackmon, Manager of Engineering

Blue Ridge Electric Cooperative is a distribution cooperative serving 64,000 customers in the foothills of upstate South Carolina. The coop's 1,800-square-mile service territory follows the crescent of the Foothills Scenic Highway 11 from I-85 at the Georgia state line to Landrum, SC. The Cooperative is a member of Central Electric Power Cooperative, a Generation and Transmission Cooperative in Columbia, SC. The Cooperative has a subsidiary, Blue Ridge Security Systems, headquartered in Anderson, SC, which sells and monitors electronic security systems, CATV systems, entry systems, gates, and small generators in most states along the eastern seaboard.

3.5 Bonneville Power Administration

905 NE 11th Avenue Portland, OR 97232 Mike Weedall, VP, Energy Efficiency Sue Walsh, Smart Grid Lead, Outreach Coordinator

The Bonneville Power Administration, headquartered in Portland, Ore., is a not-for-profit federal electric utility that operates a high-voltage transmission grid comprising more than 15,000 miles of line and associated substations in Washington, Oregon, Idaho and Montana. It also markets more than a third of the electricity consumed in the Pacific Northwest. The power is produced at 31 federal dams operated by the Army Corps of Engineers and Bureau of Reclamation and one nuclear plant in the Northwest and is sold to more than 140 Northwest utilities. BPA purchases power from seven wind projects and has more than 3,000 megawatts of wind interconnected to its transmission system.

3.6 Capital Electric Cooperative Inc.

PO Box 730 Bismarck, ND 58502 Ordean "Lars" Nygren, General Manager

This rural electric distribution cooperative headquartered in Bismarck, North Dakota provides electric service to more than 15,500 customers in south central North Dakota via 2500 miles of distribution line and 167 miles of transmission line. Capital Electric owns 20 distribution substations and 2 transmission substations. Operating revenues for 2009 were over \$20 million.

3.7 Carroll Electric Membership Corporation

155 N Hwy. 113 Carrollton, GA 30117 Chip Jakins, President and CEO

Carroll Electric Membership Corporation is a member-owned electric cooperative serving seven counties in the West Georgia area and providing electric service to approximately 50,000 members. Established in 1936, Carroll EMC strives to provide quality, reliable electric service to its members while also giving back to the communities it serves.

3.8 Central Georgia EMC

923 S Mulberry St. Jackson, GA 30233

Herschel K. Arant, Jr., P.E., Vice President of Engineering Services

Central Georgia EMC is a not-for-profit consumer-owned electric distribution system serving portions of fourteen counties (Bibb, Butts, Clayton, Fayette, Henry, Jasper, Jones, Lamar, Monroe, Morgan, Newton, Pike, Putnam, and Spalding) with approximately 50,000 meters and over 5,268 miles of distribution lines.

3.9 Central Service Association

PO Box 3480 Tupelo, MS 38801

Roger W. Smith, Director of Business Development

In 1937, Central Service Association (CSA) was born of a cooperative effort by new utility distributors to create a method of using centralized expertise to perform utility customer billing and other joint services. Today, CSA remains a member-owned association that has grown to provide essential information technology and IT consulting services, along with group employee benefit plans, training, education and more to approximately 120 member utilities throughout the southeastern United States.

3.10 Central Wisconsin Electric Cooperative

150 Depot St Box 255 Iola, WI 54945 Greg W. Blum, President & CEO

Central Wisconsin Electric Cooperative serves 8000 members in a four-county area in Central Wisconsin. The cooperative has utilized load management for 3 decades that is used mainly for peak load shaving for cost control. CWEC has recently finished deployment of Cannon AMR. Many technological advances have

been made over the past five years with GPS mapping, OMS, engineering, and staking software. The cooperative offers DirecTV, WildBlue satellite internet, and is currently looking at BPL technology for broadband deployment.

3.11 Cherryland Electric Cooperative

PO Box 298, 5930 US-31 S. Grawn, MI 49637 Frank Siepker, Engineering Manager

Cherryland Electric Cooperative is one of nine cooperatives located in Michigan. It is a non-profit company that has provided electrical service to area members for 72 years. From a humble beginning with 69 members in 1938, Cherryland now serves more than 33,000 homes and businesses in a six-county area that stretches from the northern tip of Michigan's 'little finger' to 100 miles south to the middle edge of Lake Michigan. Cherryland is governed by a seven-person board of directors, who are democratically elected from among the organization's members. Cherryland is the fourth largest distribution cooperative located in Michigan, with 3,000 miles of underground and overhead lines.

3.12 Columbia REA

115 East Main Street
Dayton, WA 99328
Paul Les Teel, CEO
Gene Dawes, Chief Engineer

Columbia REA was formed in 1939 in Dayton, Washington, the gateway to the beautiful Blue Mountains. Columbia REA is a progressive, strategically focused member-owned electric cooperative that has the market power of the Bonneville Power Administration behind it. Without territorial boundaries, Columbia REA thrives in a competitive environment. The organization's mission is to take care of its members quickly, efficiently and to their satisfaction. Columbia REA excels at delivering reliable, competitively priced electric service to farms, homes and businesses in Columbia and Walla Walla Counties in Washington and Umatilla County in Oregon. Vision, innovation, a willingness to adapt, and hard work have made Columbia REA one of the most progressive electric cooperatives in the state.

3.13 Cooperative Light & Power

1554 Highway #2 Two Harbors, MN 55616 Steven Wattnem, CEO

Cooperative Light & Power is located in Two Harbors, MN, which is in the northeast part of the state, along the North Shore of Lake Superior. It serves 5,900 members with 6,600 meters and serves those members with 939 miles of line and 20 employees. CLP provides other services to the surrounding area, such as fixed wireless internet as well as dial up internet, DirecTV services, long-distance telephone services, and First Call in-home emergency services.

3.14 Covington Electric Cooperative, Inc.

P.O. Box 1357 Andalusia, AL 36420 Charles Short, President, CEO & General Manager

Serving 22,452 meters from 2,701 miles of line in parts of six Alabama counties located in south central Alabama, the Covington Electric Cooperative provides internet service, energy efficiency loans, and other marketing through a subsidiary, Covington Rural Services. The organization implemented cost-based rates in mid-2009 after talking to the membership about it for approximately five years. The Covington Electric Cooperative has a very progressive board that supports economic development and the education system in the organization's geographic footprint. In 2010, the board approved and distributed \$200 per teacher unit in the six school systems where CEC is the power provider.

3.15 ELMAR Aruba

Wilhelminastraat 110 P.O. Box 202 Oranjestad, Aruba 00297 5237112 Leo Boekhoudt, Technical Manager

ELMAR is the electricity distribution company of Aruba, an island with 110,000 inhabitants. ELMAR purchases the energy from the WEB Power Plant at 60kV level, which is transmitted to 7 substations by means of 90km of underground cables. At the substations, there are a total of 14 power transformers; the 12kV distribution grid is fed by underground cables and by overhead power lines. Low tension distribution capabilities include over 800km of overhead lines and 500km of underground cables.

3.16 Escambia River Electric Cooperative, Inc.

3425 Hwy 4 West PO Box 428 Jay, FL 32565 Clay R. Campbell, GM/CEO Wesley Scott, Director, Outside Services

This electric cooperative is located in the northwest corner of Florida and serves an area encompassing two counties that are north of Pensacola, Florida. EREC is bordered on two sides by Alabama. EREC serves approximately 10,000 meters, and also operates a water system and a post office. The coop offers propane gas service as well as DirecTV and WildBlue internet service.

3.17 Forked Deere Electric Cooperative

1135 N Church Street Halls, TN 38040 Jeff Newman, CEO

Forked Deer Electric is a rural cooperative located in west Tennessee. The cooperative was formed in 1940. The customer base is predominantly residential and has approximately 1400 miles of line bordering the Mississippi River.

3.18 Fort Loudoun Electric Cooperative

PO Box 1030 Vonore, TN 37885 Jimmy K. Kendrick, CEO

Fort Loudoun Electric Cooperative serves portions of Blount, Loudoun and Monroe Counties in Tennessee. The cooperative is a private, non-profit organization owned by the members it serves. The service area is divided into eight districts and a director is elected from each district every three years. Fort Loudoun Electric Cooperative has grown far beyond the most optimistic early planning. Currently, FLEC serves over 31,000 customers with over 3,100 miles of distribution lines. FLEC is growing with the area and as a result has become a thriving, dynamic organization and a very vital part of the communities in the area served.

3.19 Gibson Electric Membership Corporation

1207 South College Street
PO Box 47
Trenton, TN 38382
Daniel Rodamaker, President and CEO
Charles Phillips, VP of Engineering and IT

Gibson Electric Membership Corporation is a nonprofit, member-owned and democratically controlled electric cooperative formed in 1936 and located in Trenton, Tennessee. It has four satellite customer service centers and serves 35,000 member-owners over 2,900 miles of line in eight northwest Tennessee counties. With 85 employees and an eleven-member Board of Trustees, Gibson EMC's mission is to provide members with safe and reliable electric service at an affordable price.

3.20 Henry County REMC

PO Box D New Castle, IN 47362 Steve Wolfrom, General Manager

Henry County REMC is 9,800-meter electric cooperative in New Castle, IN, 45 miles east of Indianapolis, with 24 employees. The system is 88% residential. Henry County REMC has \$28 million in plant. Its substations are owned by Hoosier Energy or Duke. Henry County REMC completed installation of AMI two years ago and began participating in Hoosier Energy's load control program this year using TWACs. REMC is looking at smart grid options that interface with end-use members, as well as implementing and integrating GIS mapping with other systems.

3.21 Horry Electric Cooperative, Inc.

PO Box 119 Conway, SC 29528-0119 J. Reed Cooper, P.E., Manager of Engineering

Horry Electric Cooperative is a non-profit, member-owned organization providing information and energy-related services on a fair and equitable basis. Organized April 24, 1940 with 627 charter members, the Cooperative now serves more than 64,000 active meters through 22 substations across more than 4,000 miles of distribution line in Horry County. A Touchstone Energy Cooperative, the organization strives to provide reliable and affordable electric service, offering a wide range of programs and services, being responsive to the needs of members and operating as efficiently, safely and economically as possible.

3.22 Jay County REMC

PO Box 904
Portland, IN 47371
John Nill, CPA, President/CEO
Duane Monroe, Operations Foreman

Jay County REMC is an electric distribution cooperative. The REMC was incorporated in 1936 to serve rural areas. Many investor-owned utilities did not want to provide electricity to remote rural areas because it would not be profitable, a situation that spurred the creation of REMCs. Jay County REMC provides electricity to members in Adams, Blackford, Delaware, Jay, Randolph and Wells Counties. The REMC has over 5,000 members, 1,200 miles of wire, and 19 employees.

3.23 Kosciusko REMC

370 S 250
E. Warsaw, IN 46582
Steve Rhodes, President and CEO

Founded in 1938, Kosciusko Rural Electric Membership Corporation is a member-owned corporation in northern Indiana. In 1998, KREMC formed a partnership with Touchstone Energy, a nationwide alliance of over 600 electric cooperatives. The Touchstone Energy partnership has enabled KREMC to expand its service by sharing ideas and advanced technologies with other cooperatives around the country. KREMC is dedicated to safely providing quality electric energy and services to customers at a competitive cost. Currently, KREMC serves over 17,000 members throughout Kosciusko County and into surrounding counties.

3.24 Matanuska Electric

163 E Industrial Way PO Box 2929 Palmer, AK 99645 Joe Griffith, General Manager

Matanuska Electric Association, Inc., Alaska's oldest and second-largest electric cooperative, is owned and operated by its members. MEA was founded in 1941 to serve the Matanuska Valley with electricity. Formed with just a few members, MEA has now grown to include over 55,000 points of service. Today, MEA's service area is 3,360 square miles in south central Alaska. Comparatively, it is nearly the same size as the 2.2 million acre Yellowstone National Park. MEA is listed as one of Alaska's top 49 businesses, and is proud to be a multi- year Tree Line USA award recipient.

3.25 Mecklenburg Electric Cooperative

PO Box 2451 Chase City, VA 23924 John C. Lee, Jr., President & CEO

Mecklenburg Electric Cooperative (MEC) is a Touchstone Energy Cooperative, headquartered in Chase City, Virginia, with three district offices in Chase City, Gretna, and Emporia. Serving over 31,000 accounts, it provides electricity to portions of nine counties in Southside Virginia. Mecklenburg Electric Cooperative is an integral part of the community with memberships in 13 Chambers of Commerce, contributions to local organizations, scholarship programs, local event sponsorships, and support of all economic development efforts. MEC has served its members since 1938 and will strive to continue to fulfill its mission of providing safe, reliable, affordable and environmentally responsible electric service.

3.26 Midwest Electric, Inc

PO Box 10 St. Marys, OH 45885 Rick D. Gerdeman, Manager/CEO

Based in St. Marys, Ohio, Midwest Electric, Inc., is a member-owned electric cooperative serving nearly 11,000 consumers in seven west central Ohio counties with a distribution system that includes 1,578 miles of line. Its wholesale power supplier is Buckeye Power, Inc., and the coop sold 230.6 million kilowatt hours and had \$21.3 million in operating revenues in 2009. Midwest Electric was named the 2007 National Electric Cooperative of the Year by the National Rural Electric Cooperative Association for the highly successful Co-Op Owners for Political Action Program. In 2009, Midwest Electric received the highest customer satisfaction rating in Ohio among all electric utilities for the second time in five years.

3.27 Midwest Energy Cooperative

901 E State Street PO Box 127 Cassopolis, MI 49031 Robert L. Hance, President/CEO

Midwest Energy Cooperative is a member-owned utility providing electric distribution and an assortment of energy-related programs and services to more than 35,000 residential, agricultural, commercial and industrial customers in 11 counties in southern Michigan and northern Indiana and Ohio. The cooperative is committed to providing reliable energy services with exceptional customer care, and gives back to those it serves through active education, community involvement and volunteer outreach programs.

3.28 Mora-San Miguel Electric Cooperative, Inc.

PO Box 240 Mora, NM 87732 Abran H. Romero, General Manager Daniel Romero, Board Chairman

Mora-San Miguel Electric Cooperative, Inc. is located in the beautiful Mora Valley in the northeastern part of New Mexico. We also have a district office in Pecos, NM. We have a total of 42 employees in our cooperative and serve four different counties (Mora, San Miguel, Guadalupe and Santa Fe). MSMEC serves a total of 10,700 consumers and has 12,500 total services in place.

3.29 Niobrara Valley Electric Membership Corporation

PO Box 60 427 N 4th Street O'Neill, NE 68763 John Hoke, CEO

Niobrara Valley EMC is located in north central Nebraska with 5,782 meters and 2,625 miles of line, forty percent of which is three phase. The cooperative has been using SCADA for 30 years and positive load control for over twenty, controlling all but 10% of the system's irrigation load. The system also serves a large recreation load along the Missouri river. The distribution system is primary at 7.2 kV, takes wholesale service at three 115kv, six 69 kV and four 34.5 kV substations for the 95 miles of sub-transmission line owned by the cooperative.

3.30 North East Mississippi Electric Power Association

PO Box 1076 Oxford, MS 38655 Bob Collier, General Manager, CEO Keith Hayward, Assistant Manager

In May 1938, electricity first flowed through 95 miles of North East Mississippi Electric Power Association's distribution lines, lighting up nearly 200 homes. North East MS EPA's membership has grown significantly over the past 67 years and now numbers 20,995. While the coop still serves a number of farms, it also provides electricity to 18,489 residents and 2,447 commercial and industrial members, including The University of Mississippi. The North East MS EPA maintains 1,908 miles of line in its 920-square-mile service area, which includes parts of Lafayette, Marshall, Union, Pontotoc, and Benton Counties in Mississippi.

3.31 Northern Neck Electric Cooperative

85 St. Johns Street
P.O. Box 288
Warsaw, VA 22572
Greg W. White, President & CEO

Northern Neck Electric Cooperative is situated between the Potomac and Rappahannock Rivers in Virginia. NNEC is a rural distribution electric cooperative with 56 employees, 18,500 meters, and over 2,000 miles of line. The coop serves the counties of Lancaster, Richmond, Westmoreland, Northumberland, King George, and Stafford. Using TWACS for automatic meter reading and pinging meters during outages, NNEC can send hourly, daily and monthly meter readings/ usage to members by email. SCADA provides substation load information and is used for voltage reduction during peak periods and to open/close devices. Load management incorporates water heater switches and DRU a/c smart switches.

3.32 Northern Rio Arriba Electric Cooperative, Inc.

PO Box 217 Chama, NM 87520 Benjamin Leyba, Executive Vice President/General Manager

NORA is a non-profit rural electric cooperative organized under the NM Rural Electric Cooperative Act. Located in Chama, New Mexico, NORA was incorporated on October 31, 1949 and is a member of Tri-State Generation & Transmission Association, Inc. The electric system provides electricity in the northern portion of Rio Arriba County. It is comprised of 487 miles of distribution line and 45 miles of 69kv transmission line and serves over 4000 consumers. NORA's mission is to provide courteous, reliable service to all users at the lowest rates with sound financial management.

3.33 Oconto Electric Cooperative

7479 REA Road PO Box 168 Oconto Falls, WI 54154 Byron C. Nolde, CEO

In 1937, Oconto Electric Cooperative energized its first 75 miles of distribution line. In 1949, OEC achieved another unique milestone when the first of two 500-kW generating units went into operation at a new dam, as there are very few distribution cooperatives that own and operate a hydroelectric facility. OEC has 30 full-time employees, serves 9,546 members, mostly in Oconto County but also in parts of Menominee, Marinette and Shawano Counties. OEC has diversified its

services to the community and OEC members by owning and operating a Radio Shack franchise store, along with selling cell phones and service offered through Cellcom, located within the store.

3.34 Oklahoma Electric Cooperative

PO Box 1208 Norman, OK 73070 Charles Barton, CFO

Oklahoma Electric Cooperative has been located in Norman, Oklahoma since 1937. OEC currently serves over 48,000 members in seven counties in central Oklahoma. One hundred seventeen employees maintain over 5,200 miles of electric lines.

3.35 Oneida-Madison Electric Cooperative, Inc

PO Box 27

Bouckville, NY 13310

Wayne C. Sherwood, General Manager and CEO

Oneida-Madison Electric is located in central New York, an area known as the Leatherstocking Region, about 45 miles southeast of Syracuse. OMEC's service area covers about 1,250 square miles in parts of Madison and Oneida Counties. This is a rural area with several medium to large tracks of undeveloped land available for businesses or industry. OMEC was established in 1941; a year later, with the inclusion of Madison County, Oneida-Madison Electric Cooperative Incorporated was established. The system became a New York Power Authority customer in 1959 and presently serves more than 1,600 customers.

3.36 Otsego Electric Cooperative

PO Box 128 Hartwick, NY 13348 Steve Rinell, CEO James Foote, IT Systems Manager

Otsego Electric Cooperative, Inc. serves townships in four counties in central New York. With more than 760 miles of line, 7 substations, and over 4,500 active meters, the organization's mission is to provide safe and reliable electric service to members. The Otsego Electric Cooperative is investigating ways to provide broadband services to members and also seeks to utilize the system to improve the cooperative's reliability and operations.

3.37 People's Electric Cooperative

PO Box 429 Ada, OK 74820 John Hudson, Senior VP Operations & Engineering

People's Electric Cooperative serves 20,000 members in 11 south central/southeastern Oklahoma counties. PEC is a very progressive competitor, operating 4800 miles of distribution line and 25 miles of 138 kV transmission line. PEC substations are all automated for data and control and all meters are read via powerline carrier. Additionally, all service trucks have AVL tracking and mobile service orders. PEC just completed GIS inventory and is integrating systems such as SCADA, Dispatch, Staking and CIS to utilize this data. PEC has also recently incorporated interactive, high-definition, 360° virtual tours of all substations, providing an immediate visual reference of all field assets.

3.38 Prairie Power, Inc

2103 S Main PO Box 310 Jacksonville, IL 62651

Robert D. Reynolds, Senior Director, Demand Response and Members Services Prairie Power, Inc. is a member-owned, not-for-profit electric generation and transmission cooperative supplying wholesale electricity to 10 member distribution cooperatives in Illinois. These distribution cooperatives provide retail electric service to approximately 78,000 ultimate customers in central Illinois.

3.39 Roanoke Electric Cooperative

PO Box 1326 Ahoskie, NC 27910

Marshall K. Cherry, Vice President, Member Services and Marketing

Roanoke Electric Cooperative is a rural electric distribution cooperative providing service to over 14,500 accounts in northeastern North Carolina. The company has over 2,000 miles of distribution lines in Bertie, Chowan, Gates, Halifax, Hertford, Northampton and Perquimans Counties. Known for being a leader in the areas of economic and community development, Roanoke Electric Cooperative has won the prestigious NRECA Community Service award on two different occasions.

3.40 Salt River Electric Cooperative Corporation

111 W Brashear Ave. Bardstown, KY 40004 Larry Hicks, CEO Tim Sharp, COO

Salt River Electric is a member-owned distribution cooperative that provides electricity to 47,000 customers in Bullitt, Nelson, Spencer and Washington Counties. The company has been providing power and service to homes, businesses, and industry since 1938, and currently has an operating budget of \$122 million. Salt River employs about 75 area residents, and these experienced workers operate four separate offices and maintain almost 4,000 miles of line across the central part of the state. The coop is headquartered in historic Bardstown, Kentucky and is controlled by six directors and CEO Larry Hicks.

3.41 Howard L. Scarboro

672 Fletchers Level Rd. Amherst, VA 24521 Howard L. Scarboro, Management Consultant

Howard Scarboro retired as President/CEO of Central Virginia Electric Cooperative in 2008 after 40 years in the electric utility industry and now works as an independent management and marketing consultant.

3.42 Shelby Electric Cooperative

Route 128 & N 6th Street PO Box 560 Shelbyville, IL 62565 James Coleman, President/CEO

Based in Shelbyville, Illinois, Shelby Electric Cooperative is a member-owned electric distribution cooperative serving nearly 9,900 consumers in all or parts of nine central Illinois counties. They distribute electricity to their members over 2,233 miles of energized line through their wholesale power provider Prairie Power, Inc. They also serve their membership and rural communities through two subsidiaries. Shelby Energy provides LP gas, bulk oil services & Generac generators and PWR-net offers wireless broadband internet. The organization was a recipient of the 2007 Expanding Excellence Award by Electric Light & Power for their residential interruptible rate/generator/AMR load control program.

3.43 South Central Indiana REMC

300 Morton Avenue Martinsville, IN 46151 Greg McKelfresh, Sr. VP of Business Technology Jack Hubbard, VP of Engineering

South Central Indiana REMC is a rural-electric cooperative in the state of Indiana serving more than 33,000 members in Morgan, Monroe, Brown, Owen, and parts of Putnam, Clay and Johnson Counties. The headquarters for SCI REMC is located in Martinsville, Indiana. The coop's G & T is Hoosier Energy. South Central Indiana REMC also offers metered propane, home security, long distance service, and broadband over power lines. All of these services except broadband are offered through the cooperative's subsidiary organization. Broadband is currently offered for members on four of the cooperative's 21 substations.

3.44 Southwestern Electric Cooperative, Inc.

525 US Route 40 Greenville, IL 62246 John Graminski, Director of Information Technology

Southwestern Electric Cooperative, Inc. is a not-for-profit, member-owned, independent cooperative headquartered in Greenville, Illinois. SWECI was formed in 1939 with a loan from the Rural Electrification Administration. The cooperative serves more than 22,000 residential, commercial, agricultural and industrial members in southwestern Illinois; maintains nearly 3,500 miles of power line and 24 substations; owns and operates a 47 MW peaking plant; and has a 78 MW long-term power purchase agreement from Plum Point station in Arkansas. In addition, the cooperative employs 80 people and owns two subsidiary companies — New Illinois Cooperative Energy [NICE] and Propane Plus.

3.45 Steuben Rural Electric Cooperative

9 Wilson Avenue Bath, NY 14810 Bob Perry, General Manager

Steuben Rural Electric Cooperative is one of four electric cooperatives in upstate New York. Since 1944, SREC has been providing electric service to over 6000 homes and business. SREC maintains over 1500 miles of electrical distribution system throughout Steuben, Cattaraugus and Chautauqua Counties. The cooperative has 30 full-time employees and is governed by a nine-member board.

3.46 Tri-County REC, Inc.

22 Main Street PO Box 526 Mansfield, PA 16933 Craig Eccher, President & CEO

Tri-County Rural Electric Cooperative is a consumer-owned, non-profit electric utility formed in 1936. Tri-County serves a 4,750-square-mile area in seven counties of north central Pennsylvania, with over 3,206 miles of line and 24 substations within 6 districts. Tri-County members used almost 190 million kilowatt-hours of electricity in 2009. Tri-County and its cooperative partner, Claverack REC, formed C&T Enterprises to facilitate the purchase of other investor- owned companies. C&T provides management services to its affiliated companies, including approximately 175 employees. Citizens' Electric Company, Wellsboro Electric Company, and Valley Energy (a natural gas company) serve approximately 20,000 meters.

3.47 Utilities District of Western Indiana [REMC]

1666 West St. Rd. 54 Bloomfield, IN 47424 Brian Sparks, Chief Executive Officer Bob Wilson, Superintendent of Operations

Utilities District of Western Indiana Rural Electric Membership Corporation, located in southwestern Indiana, 30 miles southwest of Bloomington, serves all of rural Greene County and parts of ten other counties—Clay, Daviess, Knox, Lawrence, Martin, Monroe, Owen, Putnam, Sullivan, and Vigo. With more than 50 employees, the REMC maintains one of the largest workforces in Greene County. From its incorporation in 1936 through more than 70 years of growth and service, Utilities District of Western Indiana REMC has been in the business of improving the quality of life for its member-owners by delivering electric service. Today, the REMC delivers electricity to more than 19,000 meters in eleven counties, through a network of more than 2,500 miles of distribution line in a service territory covering nearly 10,000 square miles. UDWI REMC is a member of the Hoosier Energy Power Network and a Touchstone Energy Cooperative.

3.48 Valley Electric Membership Corp

1725 Texas Street PO Box 659 Natchitoches, LA 71457 Tom Epperson, President/CEO

Valley Electric, founded in 1937, is a rural cooperative serving 41,000 electronic meters in eight parishes between the Red River and Toledo Bend Reservoir in northwest Louisiana. It has 8000 miles of transmission lines, 100 employees, and three operations centers. Load growth has been 28% in the last year with this

year's peak load at 215 mw. The Cooperative now purchases wholesale power from CLECO, but its seven-member board is now in the process of considering a combination with AEP SWEPCO.

3.49 Washington Island Electric Cooperative

1157 Main Road Washington Island, WI 54246 Robert B. Cornell, Manager

The Washington Island Electric Cooperative, Inc. was formed in 1939 with lines energized in 1946. The Cooperative employs four and serves approximately 1000 meters and 120 miles of line on Washington Island, WI, an island 4.5 miles from the mainland that is reachable only by ferry or airplane. The coop purchases power on a wholesale basis from Wisconsin Public Service via submarine cable that was installed in 1981. Prior to that time, all electricity was generated using diesel generators, and the Cooperative still maintains full back-up to carry members through times of interruption. The Cooperative installed a broadband over power lines project to serve all customers beginning in 2008 and is currently fully deployed.

3.50 West Florida Electric Cooperative Association, Inc.

5282 Peanut Rd Graceville, FL 32440 William S. Rimes. President and CEO

West Florida Electric Cooperative is a non-profit Touchstone Energy Cooperative owned by its members and locally operated. WFEC serves approximately 28,000 meters, providing dependable electricity and other services at competitive prices in Calhoun, Holmes, Jackson and Washington Counties in northwest Florida. Established in 1937, WFEC is headquartered in Graceville, Fla., and maintains district offices in Bonifay and Sneads. In addition to electricity, WFEC offers local dial-up internet service, WildBlue high-speed internet service, Dish Network, the Touchstone Energy Home energy efficiency program, portable, standby and PTO drive backup power generators, whole-house surge suppression for purchase or lease, Frigidaire, GE and Hotpoint appliances, EZ Pay Power pre-paid metering, and long distance phone service. WFEC also plays a leading role in local economic development efforts, contributing to the recruitment of new industries and the expansion of existing businesses through zero- and low-interest loans and the revolving loan fund in Calhoun, Holmes, Jackson and Washington Counties.

3.51 West Kentucky RECC

1218 West Broadway Mayfield, KY 42066 David E. Smart, PE, President & CEO

West Kentucky RECC is an electric distribution cooperative headquartered in Mayfield, Kentucky that provides electric service to over 38,500 meters in the Kentucky counties of Carlisle, Calloway, Graves and Marshall. WKRECC is a TVA distributor that purchases 100% of its wholesale power from and is regulated by the Tennessee Valley Authority. The West Kentucky RECC currently operates and maintains in excess of 4,100 miles of distribution line emanating from 11 substations. The organization's primary office is located in Mayfield with satellite billing offices in Benton and Murray.

3.52 Whitewater Valley REMC

102 Brownsville Ave Liberty, IN 47353 Mike Waltz, Superintendent of Operations

Whitewater Valley REMC is located in east central Indiana on the Ohio border. The organization serves parts of seven counties and 12,000 consumers. With a mostly residential customer base, the Whitewater Valley REMC serves around seven consumers per mile and 1500 miles of line.

3.53 Wiregrass Electric Cooperative, Inc.

509 N State Hwy. 167 PO Box 158 Hartford, AL 36344 Michael S. McWaters, CEO

Wiregrass Electric was organized in 1939 and energized its first lines July 15, 1940. Today, the Wiregrass Electric Cooperative is a not-for-profit, member-owned electric distribution utility serving more than 23,000 consumers in southeast Alabama. The cooperative is an \$80 million company with over 3,550 miles of line. The Board of Trustees, management, and employees of Wiregrass Electric have worked as a team to develop a strategic plan in the areas of technology, reliability and operational excellence, growth and expansion, member communications and economic development. As both members and owners, WEC's consumers are represented by a nine-member elected Board of Trustees that makes business policy and responds to member-owner needs and expectations.

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